

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-006611**Date Inspected:** 11-Apr-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1845**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 645**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Li Jia	<b>CWI Present:</b>	Yes	No
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes No N/A	
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes No N/A	
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes No N/A	
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes No N/A	
		<b>Delayed / Cancelled:</b>	Yes No N/A	
<b>Bridge No:</b>	34-0006	<b>Component:</b>	OBG	

**Summary of Items Observed:**

Summary of Items Observed: On this date Caltrans OSM Quality Assurance (QA) Inspector, Larry Viars was present during the times noted above for observations relative to the work being performed.

Bay 9-  
Gantry 1 / PMT 1

The Caltrans QA Inspector monitored the OBG Production Monitoring Test (PMT) for Deck Panels DP347-001 (11BE) and 347-002 (11BE). The Caltrans QA inspector recorded amperage, voltage and travel speed of the Gas metal Arc Welding (GMAW) root pass and the Submerged Arc Welding (SAW) cover pass. A Visual inspection of the fit up, tack welds, root pass and cover pass was performed by ZPMC QC Li Jia, American Bridge Flour (ABF) Huang Wen Guang and the Caltrans QA. The Caltrans QA observed ZPMC QC Xue Hai Rong perform Ultrasonic testing of the Partial Joint Penetration weld for depth of penetration. Mr. Xue found the depth of penetration of the PMT welds to be in compliance with contract documents. The Caltrans QA inspector designated locations for Macroetch samples (15 locations). Macroetch samples were evaluated with a 7x optical comparator and accepted by ZPMC QC, ABF QC and the Caltrans QA Inspector.

OBG Trial Assembly Area-

This QA inspector witnessed ZPMC Radiographic personnel performing radiography on OBG segment 3AW to 3BW Deck Panel splice weld OBW3-4. Locations for radiography were selected by Calrans QA. Testing was performed with a Radioflex-300E x-ray tube s/n CR0017-10. ZPMC RT level II Zhao Yi stated the focal spot size

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## WELDING INSPECTION REPORT

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was 2.5mm x 2.5mm, Kilovolts 170, and 5 milliamps. Caltrans QA observed that the radiographic testing appeared to be in conformance with AWS D1.5.

Bay 12-

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member is identified as OBG Deck panels, DP363-001 (8BE) and DP336-001 (8BE) . The weld identification numbers were DP363-001 welds 001 through 010 and DP336-001 welds 001 through 008.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

Only general conversations between QC and QA this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150 0042 2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Viars,Larry	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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